28 April 2023



Statistical release: BIS international banking statistics and global liquidity indicators at end-December 2022

- Banks' cross-border claims fell by <u>\$1.4 trillion</u> in Q4 2022, slowing the year-onyear (yoy) growth rate to <u>6%</u>. Both lower bank credit (ie loans and holdings of debt securities) and a drop in the market value of banks' derivatives and other residual instruments contributed to the decline.
- Global cross-border bank credit (ie loans and holdings of debt securities) fell by \$749 billion, or \$400 billion on a seasonally adjusted basis. Euro-denominated credit declined by \$231 billion after expanding earlier in the year.
- Cross-border bank credit to emerging market and developing economies (EMDEs) fell by \$179 billion in Q4 2022 due to weaker dollar lending. Credit to the Asia-Pacific region contracted the most.
- The BIS global liquidity indicators (GLIs) show a large contraction in dollar credit to non-banks in EMDEs in Q4 2022. Dollar credit to EMDEs shrank by 4%, a rate last seen during the Great Financial Crisis of 2007–09.

Global cross-border credit dropped in late 2022

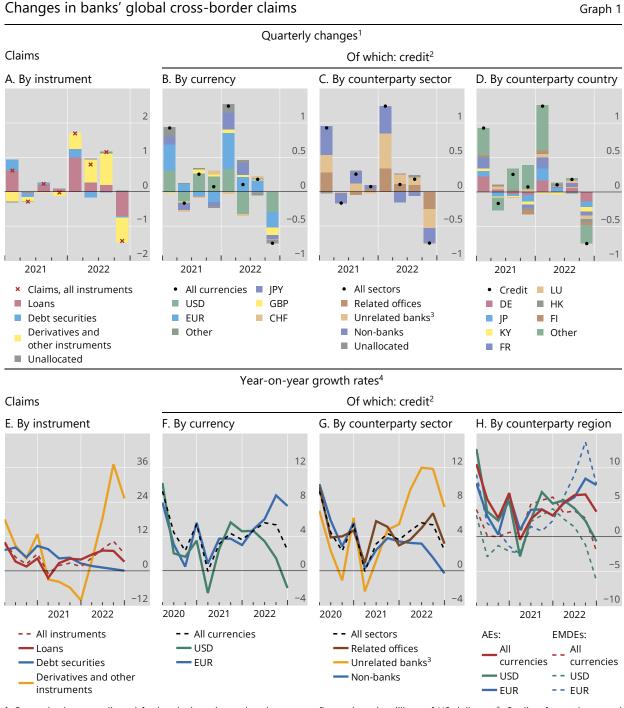
The BIS locational banking statistics (LBS) show that banks' cross-border claims fell by <u>\$1.4 trillion</u> during the fourth quarter of 2022 (Graph 1.A). This decline slowed yoy growth to <u>6%</u> on an FX- and break-adjusted basis (Graph 1.E).¹ Graph 1 summarises the changes (top row) and the annual growth rates (bottom row) across instruments, currencies and counterparties. The contraction in Q4 2022 reflected both a drop in the gross positive market value of derivatives and other instruments (–\$718 billion, Graph 1.A, yellow bars) and a decrease in credit (–\$749 billion). Seasonal factors, eg the tendency for claims to contract at year end, accounted for roughly half of the overall decline in Q4.

The weakness in cross-border bank credit was evident across all major currencies (Graph 1.B). In Q4, US dollar-denominated credit fell by \$293 billion to \$14.6 trillion, 2% lower than at end-2021 (Graph 1.F). Euro-denominated credit, which had grown in the previous three quarters, dropped by \$231 billion, the largest decline since end-2019. Even so, at \$8.9 trillion, euro credit at end-2022 was 8% higher than at end-2021 (Graph 1.F), due to brisk growth in cross-border lending within the euro area. Sterling credit fell sharply (-\$106 billion) against the backdrop of gilt market dysfunction in September-October 2022.

Cross-border credit to all sectors declined, with interbank positions contracting the most (Graphs 1.C and 1.G). Interbank credit shrank by \$533 billion, although more than half of this reflects seasonality in the data. Interbank credit to unrelated banks

After reaching record highs in Q3, the US dollar depreciated against many currencies during Q4 2022. Dollar depreciation increases the amounts outstanding in other currencies when expressed in US dollars. Quarterly changes are reported on an adjusted basis, after removing such exchange rate valuation effects and statistical breaks.

and to related offices dropped by more than \$250 billion each. Credit to non-banks fell by \$199 billion, bringing the yoy growth rate to -0.3%.²

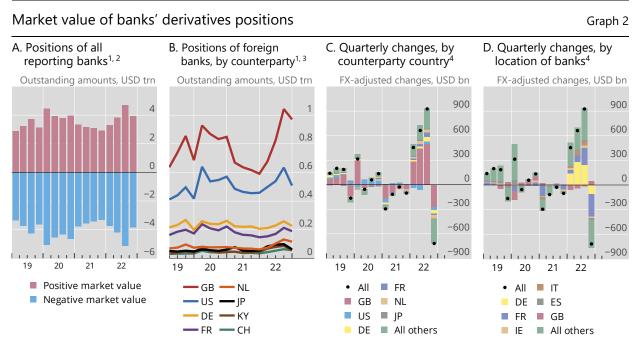


¹ Quarterly changes adjusted for breaks in series and exchange rate fluctuations, in trillions of US dollars. ² Credit refers to loans and holdings of debt securities, ie excluding from "claims" all other instruments (derivatives with positive market value, equity and other residual instruments). ³ Includes credit to central banks and to banks unallocated by subsector. ⁴ Annual compound adjusted change, in per cent. Source: BIS locational banking statistics.

² The March 2023 <u>BIS Quarterly Review</u> noted that bank lending was restrained in Q4 2022, with lending surveys in the United States and euro area showing widespread retrenchment.

Market value of derivatives fell in Q4 following surges earlier in 2022

The market value of banks' derivatives positions fell in Q4 2022 (Graph 1.A), following three quarterly increases amid elevated market volatility and changing policy rates. The BIS consolidated banking statistics (CBS), which track the consolidated positions of banks headquartered in a given country, show the size of banks' derivatives books with unaffiliated counterparties (Graph 2.A and 2.B). Derivatives with a positive market value fell to <u>\$4 trillion</u> by end-Q4 2022. Those with a negative market value moved in tandem, leaving net market values close to zero (Graph 2.A).



¹ Based on CBS; the data include positions vis-à-vis all unaffiliated counterparties. ² Including positions in banks' home countries. The data for Q4 2022 include a break-in-series in the negative market value of about \$500 billion reported by France. ³ All reporting banks' combined derivatives with positive market value vis-à-vis the counterparty countries listed in the legend. ⁴ Based on LBS cross-border claims; derivatives with positive market value, equity and other residual instruments, vis-à-vis all sectors including affiliated banks. Sources: BIS consolidated and locational banking statistics.

The rise and subsequent drop in <u>derivatives positions</u> over the course of 2022 was most pronounced vis-à-vis counterparties in the United Kingdom and the United States (Graph 2.B), countries with outsize roles in the clearing of derivatives. The LBS, which capture the market value of derivatives somewhat less precisely than the CBS, also show a relatively <u>large decline</u> vis-à-vis the United Kingdom (Graph 2.C), reported mainly by banks in France and Germany (Graph 2.D).³

Weaker dollar lending drives Q4 contraction in credit to EMDEs

Banks' cross-border credit to EMDEs declined by <u>\$179 billion</u> in Q4 2022, driven by reduced lending in US dollars (Graph 3.A).⁴ Dollar credit fell by \$142 billion (–6% yoy), the largest quarterly contraction since mid-2012. Credit in other major currencies also

- ³ In the LBS used in Graphs 2.C and 2.D, the market value of derivatives is reported in "other instruments" together with banks' holdings of equity and other instruments not otherwise classified.
- ⁴ This decline was broadly unrelated to year-end effects: it was almost as large (\$160 billion) on a seasonally adjusted basis.

fell, but by far less. The relative weakness in dollar lending may reflect higher US policy rates and the strength of the dollar going into Q4 (see discussion of Graph 5 below). Overall, outstanding cross-border credit to EMDEs was down 2% yoy (Graph 1.H).

Changes in cross-border bank credit to EMDEs¹

Quarterly FX- and break-adjusted changes, in billions of US dollars

D. Credit to Asia-Pacific, by A. By currency B. By counterparty region C. By counterparty country² lender region 100 100 100 100 0 0 0 -100 -100 -100 -100-200 -200 200 -200 2021 2022 2021 2022 2021 2022 2021 2022 EMDEs Credit JPY FMDF ΗK AE . All reporters Other AEs EUR GBP China SG RU Euro area Other EMEs Asia-Pacific ex China KR USD Other Others Asia-Pacific EM Europe Africa and Middle East Latin America

Credit to emerging Asia contracted by a sizeable <u>\$142</u> billion (Graph 3.B). Banks in the region, as well as those in the euro area and other AEs, all reported lower credit to borrowers (mainly non-banks and unrelated banks) in the region (Graph 3.D). Credit to Hong Kong SAR and Singapore fell by a combined \$80 billion (Graph 3.C). By contrast, bank credit to China was flat overall as greater inter-office lending offset an outsize decline in lending to non-banks, the largest since Q1 2016 (see GLI section).

Banks winding down exposures to Russia

Banks continued to reduce their <u>cross-border claims on Russia</u> in Q4 2022, even as their liabilities to the country remained elevated (Graph 4.A).⁵ Cross-border claims on Russia dropped for the fourth consecutive quarter, for a total decline of \$27 billion (–30%) since end-2021; at the same time, cross-border liabilities to the Central Bank of the Russian Federation grew by \$85 billion⁶ (Graph 4.A, blue bars), reflecting mainly

Graph 3

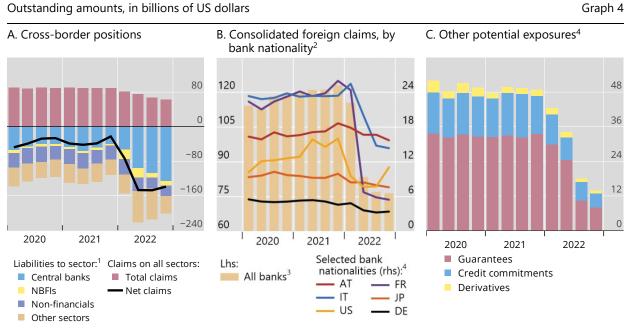
¹ Credit refers to loans and holdings of debt securities, ie removing from "total claims" all other instruments (derivatives with a positive market value, equity and other residual instruments). ² The countries shown are the ones with the largest adjusted changes in the latest quarter. Source: BIS locational banking statistics by residence.

⁵ The positions vis-à-vis Russia are reported by other BIS reporting countries. The BIS ceased to receive data submissions from the authorities in Russia in February 2022. Local positions booked by banks in Russia, and their positions vis-à-vis counterparties abroad, were last reported for Q3 2021.

⁶ On an FX- and break-adjusted basis, the corresponding changes were –\$22 billion (claims on all sectors) and +\$88 billion (liabilities to central bank), respectively.

an accumulation of blocked coupon payments and redemptions at Euroclear.⁷ Liabilities to non-banks in Russia changed little over this period.

Bank exposures to Russia



Panel A covers all BIS reporting banks, including banks in China and Chinese banks in other reporting countries. Panels B and C exclude Chinese banks, as Chinese authorities do not report the CBS.

¹ Liabilities (by counterparty sector) are shown as negative figures on the vertical scale. ² Foreign claims consist of cross-border claims in all currencies, local claims in foreign currency and local claims in local currency (LCLC). To limit valuation effects related to the Russian rouble exchange rate, banks' local claims in rouble (LCLC) are expressed at a constant rouble exchange rate (applying the end-2022 exchange rates to each period shown). ³ Consolidated banking statistics, on an immediate counterparty basis (CBS/I). ⁴ Consolidated banking statistics, on a guarantor basis (CBS/G).

Sources: BIS consolidated and locational banking statistics.

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The CBS provide a more comprehensive view of how banks' <u>consolidated</u> <u>exposures to Russia</u> receded in the course of 2022. Since end-2021, banks' foreign claims on Russia dropped by more than a third and stood at \$76 billion at year-end 2022 (Graph 4.B). French, US and Italian banks cut foreign claims the most during the year, in part through divestures of local offices. At the same time, CBS reporting banks also let about \$10 billion of their short-term international claims run off. Other potential exposures (Graph 4.C) fell by even more over the same period (–72%) to \$14 billion.

www.euroclear.com/newsandinsights/en/press/2023/2023-mr-01-euroclear-group-deliversanother-record-year.html.

Global liquidity indicators at end-December 2022

The BIS global liquidity indicators (GLIs) track credit to non-bank borrowers, covering both loans extended by banks and funding from global bond markets through the issuance of international debt securities (IDS). The main focus is on foreign currency credit denominated in three major reserve currencies (US dollars, euros and Japanese yen) to non-residents, ie borrowers outside the respective currency areas. The GLIs monitor growth in this credit relative to that denominated in those same currencies to residents within these currency areas (as reported in national financial accounts).⁸

In Q4 2022, foreign currency credit denominated in US dollars continued to fall while that in euros and yen expanded (Graph 5). Dollar credit to non-banks outside the United States fell by \$257 billion to \$12.8 trillion. This led to a yoy shrinkage of 4%, a rate last seen during the Great Financial Crisis of 2007–09 (Graph 6.A). By contrast, growth in euro credit to non-banks outside the euro area remained resilient at <u>8%</u> yoy, bringing the amount outstanding to $\underline{\in}4$ trillion (\$4.2 trillion) (Graph 6.B). Yen credit to non-banks outside Japan expanded further in Q4 (+<u>17%</u> yoy) fuelled by bank loans (Graph 5.C, Annex Graph C.3).

In per cent A. US dollar B. Euro C. Japanese yen 10 10 5 0 0 _5 -5 | | | | -10 -10 1111 1.1 1 1 1 1 1 1 111 1 1 1 20 21 19 20 21 19 20 21 19 22 22 22 Monetary policy rate Monetary policy rate Monetary policy rate Annual growth rate: Annual growth rate: Annual growth rate: Credit to non-residents Credit to non-residents Credit to non-residents

Growth of foreign currency credit in major currencies¹

¹ Credit to non-bank borrowers outside the given currency area. The calculation of year-on-year growth rates of credit is based on the guarterly changes adjusted for breaks in series and exchange rate fluctuations (see the GLI methodology). ² Growth rate of nominal effective exchange rate index (NEER) for dollar, euro, and yen. An increase indicates appreciation of the currency.

Broad euro index²

Sources: BIS global liquidity indicators; BIS effective exchange rates; BIS policy rates.

Broad dollar index²

The divergence in credit growth across the three major currencies reflects their respective funding costs and associated exchange rate developments.⁹ The rapid pace of US monetary policy tightening during 2022 led to an exceptionally strong dollar going into the fourth quarter of 2022 (Graph 5.A, Annex Graph C.1). By September 2022, the US dollar had reached its highest level since the 1980s, making

Broad yen index²

- For more details, see the GLI methodology: www.bis.org/statistics/gli/gli methodology.pdf.
- 9 Since quarterly changes are adjusted, exchange rate fluctuations do not affect the growth rates reported in Graph 5 in a direct, mechanical way.

Graph 5

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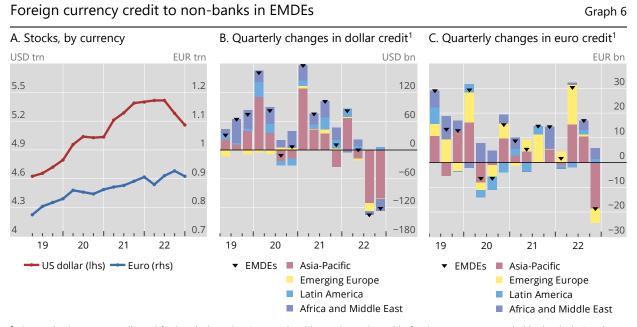
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it expensive relative to other major currencies and depressing dollar-denominated foreign currency credit.¹⁰ Euro credit started to reflect rising rates and higher valuations later in 2022 (Graph 5.B). By contrast, the Bank of Japan's commitment to monetary easing and protracted depreciation have made the yen a preferred funding currency, fuelling brisk growth in yen-denominated credit abroad (Graph 5.C).

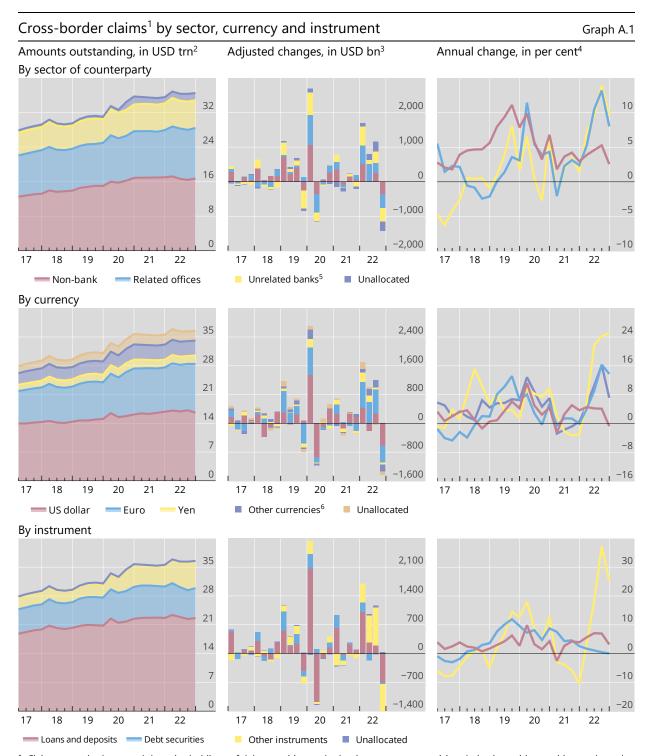
These developments first affected dollar- and later euro-denominated credit to non-banks in EMDEs (Graph 6). In Q4 2022, credit in both currencies declined, leaving the respective stocks at <u>\$5.2</u> trillion and <u>€0.9</u> trillion (Graph 6.A). Dollar credit contracted by more than \$100 billion for a second consecutive quarter (Graph 6.B), due mainly to reduced bank lending (recall Graph 3) to non-banks in Asia-Pacific (credit to those in China fell by \$52 billion). Elsewhere, dollar credit to Africa and the Middle East and emerging Europe dropped, while that to Latin America rose.



¹ Quarterly changes are adjusted for breaks in series. Data on local loans denominated in foreign currency extended by banks in Russia are not available after Q3 2021; quarterly changes are assumed to be zero in later quarters. Sources: BIS global liquidity indicators; BIS calculations.

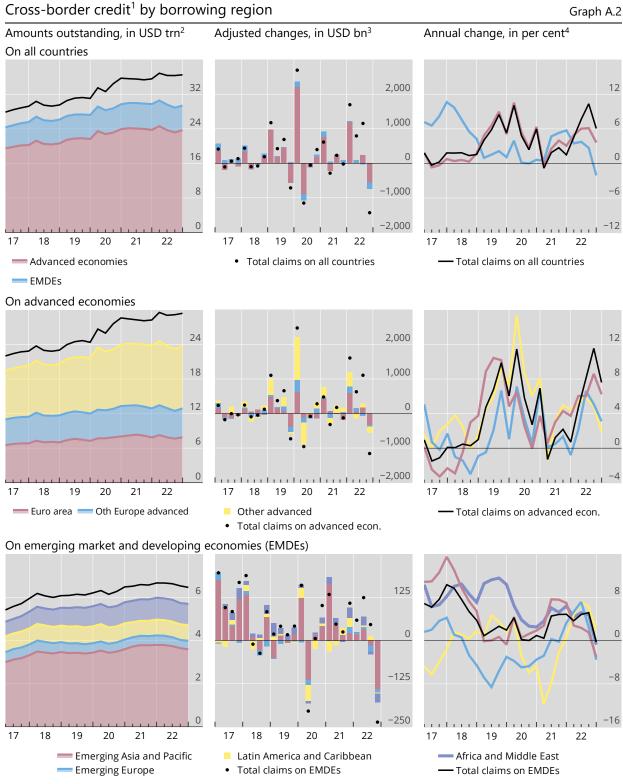
For its part, euro credit to non-banks in EMDEs fell sharply in Q4 2022 (Graph 6.C), following two years of uninterrupted growth. Loans shrank by $\underline{\in 18}$ billion, while net issuance of IDS ticked down ($-\underline{\in 1}$ billion). Euro credit to Asia-Pacific contracted the most, followed by that to emerging Europe. By contrast, euro credit to Africa and the Middle East and to Latin America expanded. The latest Q4 contraction notwithstanding, yoy growth in euro credit to EMDEs remained positive at end-2022, at 5%.

¹⁰ A growing literature documents that dollar strength leads to tighter global financial conditions, especially for emerging market economies, see eg V Bruno and H S Shin, "Cross-border banking and global liquidity", *Review of Economic Studies*, vol 82, no 2, 2015; M Obstfeld and H Zhou, "The global dollar cycle", *Brookings Papers on Economic* Activity, 2023 (forthcoming).



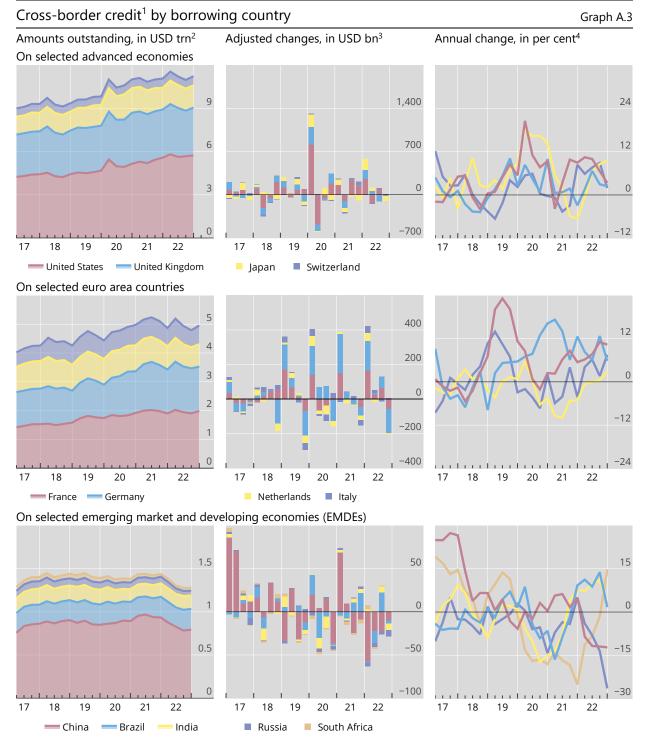
Annex A Locational banking statistics graphs

¹ Claims comprise loans and deposits, holdings of debt securities, and other instruments comprising derivatives with a positive market value and other residual instruments. 2 At quarter-end. Amounts denominated in currencies other than the US dollar are converted to US dollars at the exchange rate prevailing on the reference date. ³ Quarterly changes in amounts outstanding, adjusted for the impact of exchange rate movements between quarter-ends and methodological breaks in the data. ⁴ Geometric mean of quarterly percentage adjusted changes. ⁵ Includes central banks and banks unallocated by subsector between interoffice and unrelated banks. ⁶ Other reported currencies, calculated as all currencies minus US dollar, euro, yen and unallocated currencies. The currency is known but reporting is incomplete.

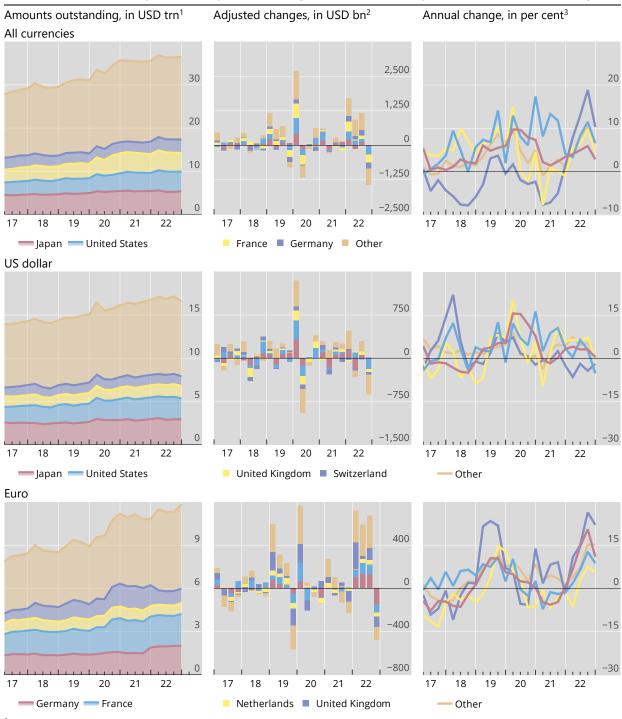


¹ Credit refers to loans and deposits, and holdings of debt securities, ie excluding from "claims" all other instruments (derivatives with positive market value and other residual instruments). ² At quarter-end. Amounts denominated in currencies other than the US dollar are converted to US dollars at the exchange rate prevailing on the reference date. ³ Quarterly changes in amounts outstanding, adjusted for the impact of exchange rate movements between quarter-ends and methodological breaks in the data. ⁴ Geometric mean of quarterly percentage adjusted changes.

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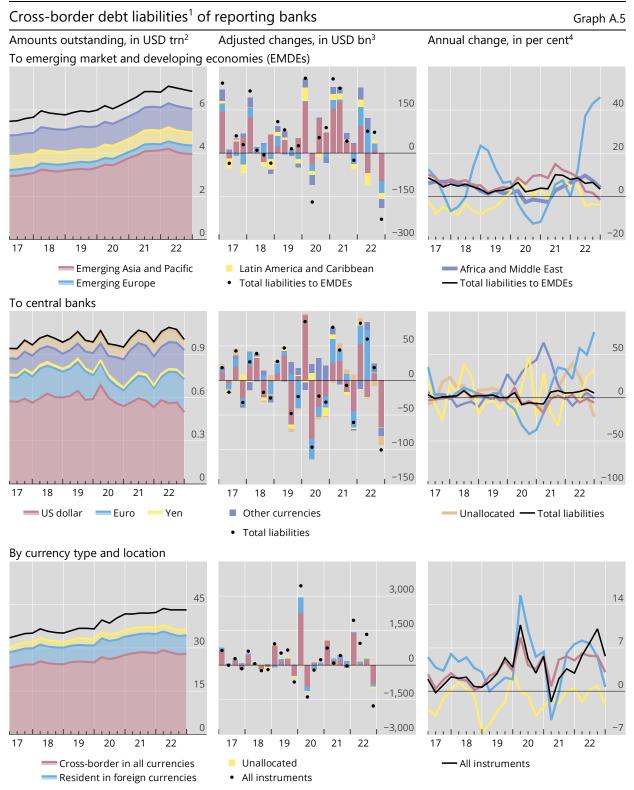


¹ Credit refers to loans and deposits, and holdings of debt securities, ie excluding from "claims" all other instruments (derivatives with positive market value and other residual instruments). ² At quarter-end. Amounts denominated in currencies other than the US dollar are converted to US dollars at the exchange rate prevailing on the reference date. ³ Quarterly changes in amounts outstanding, adjusted for the impact of exchange rate movements between quarter-ends and methodological breaks in the data. ⁴ Geometric mean of quarterly percentage adjusted changes.



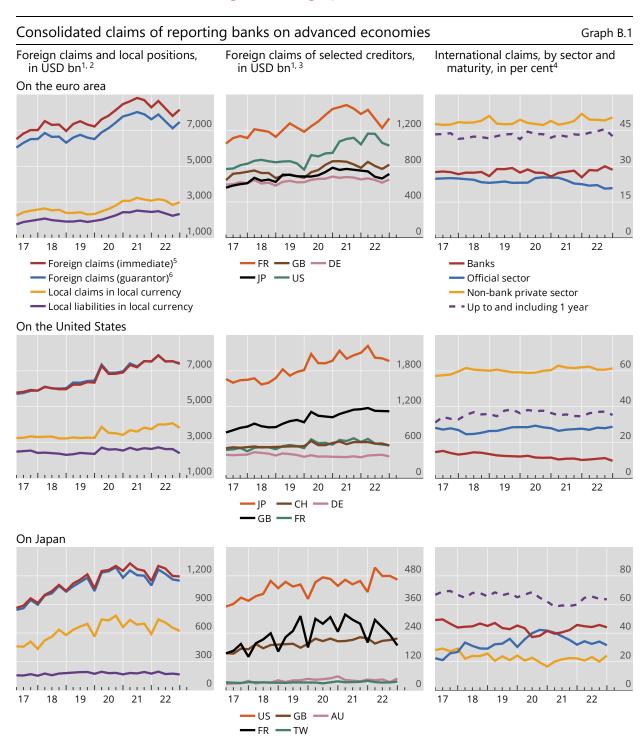
Cross-border claims by nationality of reporting bank and currency of denomination Graph A.4

¹ At quarter-end. Amounts denominated in currencies other than the US dollar are converted to US dollars at the exchange rate prevailing on the reference date. ² Quarterly changes in amounts outstanding, adjusted for the impact of exchange rate movements between quarterends and methodological breaks in the data. ³ Geometric mean of quarterly percentage adjusted changes. Source: BIS locational banking statistics. Further information is available at www.bis.org/statistics/bankstats.htm.

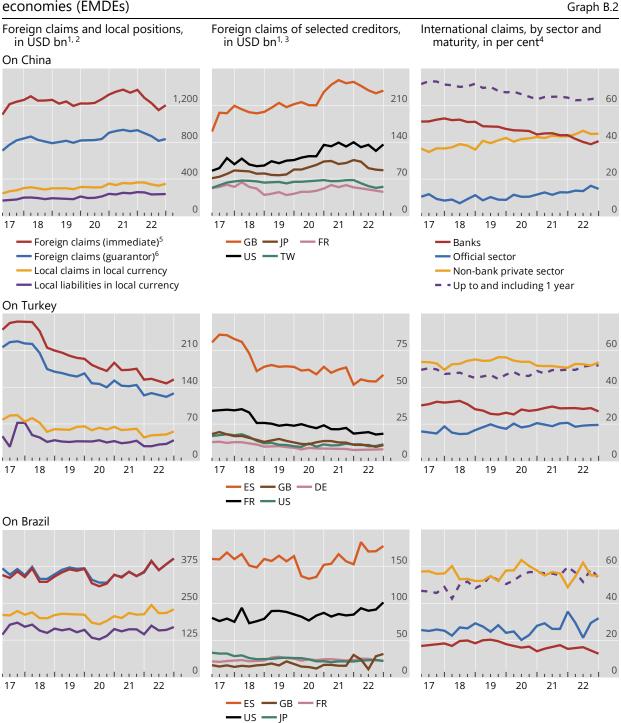


¹ Debt liabilities refer to loans and deposits and debt securities, ie excluding from "total liabilities" all other instruments (derivatives with negative market value and other residual instruments). ² At quarter-end. Amounts denominated in currencies other than the US dollar are converted to US dollars at the exchange rate prevailing on the reference date. ³ Quarterly changes in amounts outstanding, adjusted for the impact of exchange rate movements between quarter-ends and methodological breaks in the data. ⁴ Geometric mean of quarterly percentage adjusted changes.

Annex B Consolidated banking statistics graphs



¹ Amounts outstanding at quarter-end. Amounts denominated in currencies other than the US dollar are converted to US dollars at the exchange rate prevailing on the reference date. ² Excludes domestic claims, ie claims on residents of a bank's home country. ³ Foreign claims on a guarantor basis, by nationality of reporting bank. The banking systems shown are not necessarily the largest foreign bank creditors on each reference date. ⁴ As a percentage of international claims outstanding. ⁵ On an immediate counterparty basis. Includes the unconsolidated claims of banks headquartered outside but located inside CBS-reporting countries. ⁶ On a guarantor basis. Source: BIS consolidated banking statistics (CBS). Further information is available at www.bis.org/statistics/constats.htm.

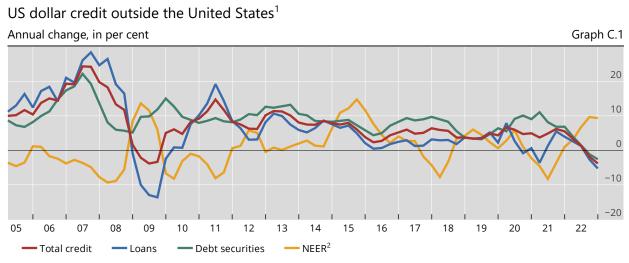


Consolidated claims of reporting banks on emerging market and developing economies (EMDEs)

¹ Amounts outstanding at quarter-end. Amounts denominated in currencies other than the US dollar are converted to US dollars at the exchange rate prevailing on the reference date. ² Excludes domestic claims, ie claims on residents of a bank's home country. ³ Foreign claims on a guarantor basis, by nationality of reporting bank. The banking systems shown are not necessarily the largest foreign bank creditors on each reference date. ⁴ As a percentage of international claims. ⁵ On an immediate counterparty basis. Includes the unconsolidated claims of banks headquartered outside but located inside CBS-reporting countries. ⁶ On a guarantor basis.

Source: BIS consolidated banking statistics (CBS). Further information is available at www.bis.org/statistics/consstats.htm.

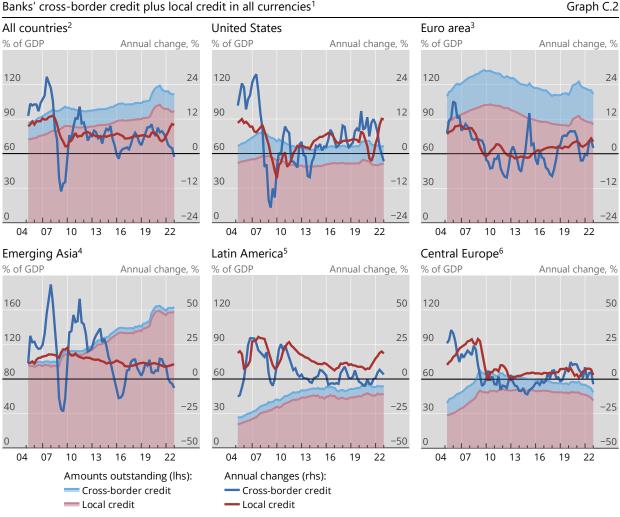
Annex C Global liquidity indicators graphs



Further information on the BIS global liquidity indicators is available at www.bis.org/statistics/about gli stats.htm.

¹ Annual growth of US dollar-denominated credit to non-banks outside the United States. ² Annual growth of the US dollar nominal effective exchange rate (NEER). An increase indicates an appreciation of the US dollar NEER.

Sources: Datastream; Dealogic; Euroclear; Thomson Reuters; Xtrakter Ltd; national data; BIS locational banking statistics; BIS effective exchange rate statistics; BIS calculations.

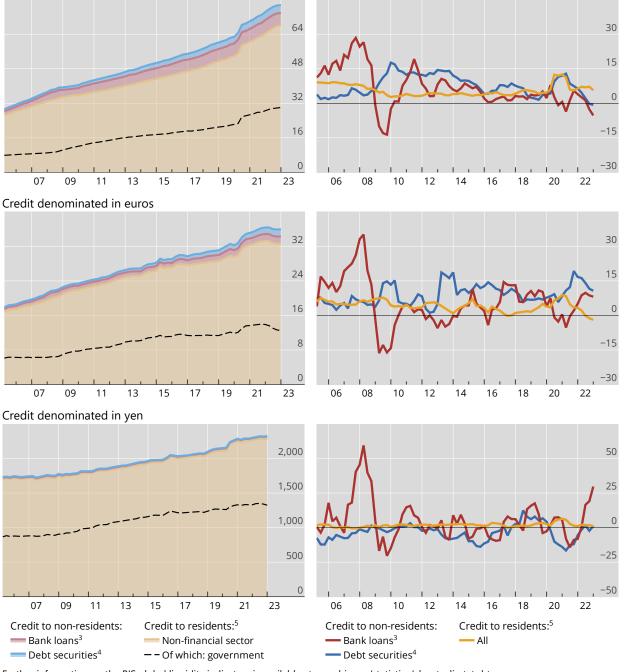


Global bank credit to the private non-financial sector, by residence of borrower Banks' cross-border credit plus local credit in all currencies¹

Further information on the BIS global liquidity indicators is available at www.bis.org/statistics/about gli stats.htm.

¹ Cross-border claims of LBS-reporting banks to the non-bank sector plus local claims of all banks to the private non-financial sector. Weighted averages of the economies listed, based on four-quarter moving sums of GDP. ² Australia, Canada, Denmark, Israel, Japan, New Zealand, Norway, Russia, Saudi Arabia, South Africa, Sweden, Switzerland, Turkey and the United Kingdom, plus the countries in the other panels. ³ Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal and Spain. ⁴ China, Hong Kong SAR, India, Indonesia, Korea, Malaysia, Singapore and Thailand. ⁵ Argentina, Brazil, Chile, Colombia and Mexico. ⁶ The Czech Republic, Hungary and Poland.

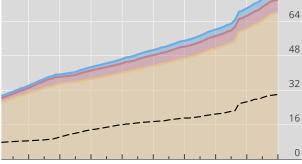
Sources: BIS statistics on credit to the non-financial sector; BIS locational banking statistics (LBS); BIS calculations.

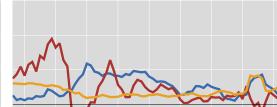


Credit denominated in US dollars

Amounts outstanding, in trillions of currency units¹

Global credit to the non-financial sector, by currency

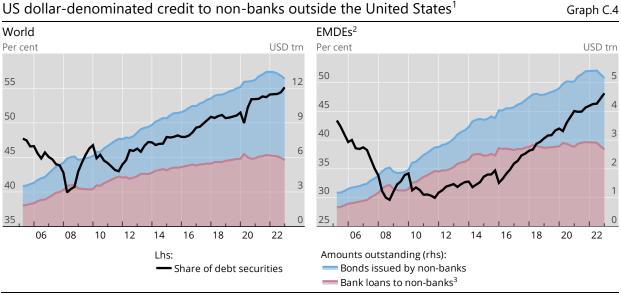




Annual change, in per cent²

Further information on the BIS global liquidity indicators is available at www.bis.org/statistics/about gli stats.htm. ¹ Amounts outstanding at quarter-end. ² Based on quarterly break- and exchange rate-adjusted changes. ³ Loans by LBS-reporting banks to non-bank borrowers, including non-bank financial entities, comprise cross-border plus local loans. ⁴ Excluding debt securities issued by special purpose vehicles and other financial entities controlled by non-financial parents. Euro-denominated debt securities exclude those issued by institutions of the European Union. ⁵ Credit to non-financial borrowers residing in the United States / euro area / Japan. National financial accounts are adjusted using BIS banking and securities statistics to exclude credit denominated in non-local currencies. Sources: Datastream; Dealogic; Euroclear; Thomson Reuters; Xtrakter Ltd; national data; BIS locational banking statistics (LBS); BIS calculations.

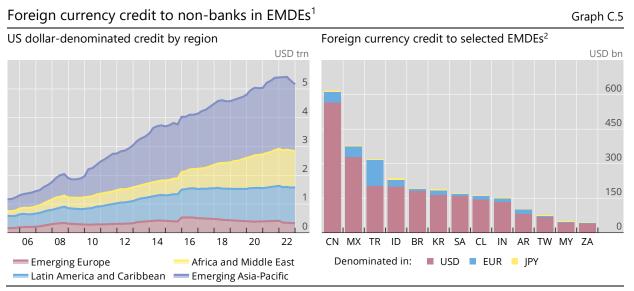
Graph C.3



Further information on the BIS global liquidity indicators is available at www.bis.org/statistics/about gli stats.htm.

¹ Non-banks comprise non-bank financial entities, non-financial corporations, governments, households and international organisations. ² From December 2022, this grouping has been aligned with the country classification in the BIS Annual Economic report, as detailed here. ³ Loans by LBS-reporting banks to non-bank borrowers, including non-bank financial entities, comprise cross-border plus local loans.

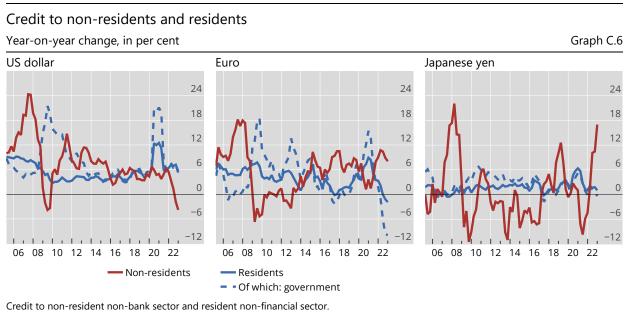
Sources: Datastream; Dealogic; Euroclear; Thomson Reuters; Xtrakter Ltd; national data; BIS locational banking statistics (LBS); BIS calculations.



Further information on the BIS global liquidity indicators is available at www.bis.org/statistics/about gli stats.htm.

¹ From December 2022, this grouping has been aligned with the country classification in the BIS Annual Economic report, as detailed here. ² Amounts outstanding for the latest available data.

Sources: Datastream; Dealogic; Euroclear; Thomson Reuters; Xtrakter Ltd; national data; BIS locational banking statistics; BIS calculations.



Sources: Datastream; Dealogic; Euroclear; Thomson Reuters; Xtrakter Ltd; national data; BIS locational banking statistics (LBS); BIS calculations.